Remote Source/Hollow Light Guide (RSL/HLG) Lighting System;
SOURCES SOUGHT

Naval Surface Warfare Center, Carderock Division (NSWCCD Code 9343) is soliciting manufacturers of lighting systems, for a lighting system to be used on U.S. Naval Platforms. The subject lighting system shall meet the requirements of references:

(1) MIL-STD-3009; DOD Interface Standard, Lighting, Aircraft, Night Vision Imaging System (NVIS) Compatible
(2) MIL-DTL-16377; Detail Specification, Fixtures, Lighting and Associated Parts; Shipboard Use, General Specification For
(3) MIL-E-917; Electric Power Systems, Basic Requirements
(4) NFPA-70 (National Electric Code, latest edition)
(5) MIL-STD-461E (Requirements for the Control of Electromagnetic Interference Emissions and Susceptibility)
(6) MIL-S-901D (Shock Testing)
(7) MIL-STD-167/1 (Vibration Testing)
(8) MIL-STD-1399 Section 300A; Interface standard for shipboard systems, Electric Power, Alternating Current
(9) FEDSPEC 505
(10) UL 1598A Marine
(11) UL 844
(12) USCG-ABS (Class , Div , Group)

All RSL/HLG lighting systems shall:

* Operate on 115 VAC per ref (8) and be spray-tight. The system shall operate with ungrounded electrical service and shall be designed such that it does not impose a ground upon the electrical power system from which it is energized. The fixture will provide a white lighting source in large deck areas (such as hangar bays, vehicle stowage areas, mess areas, etc.) and be suitable for use aboard naval ships.

* Consist of two distinct components. 1) the lighting distribution system (LDS) and 2) a point light source (Luminaire) including the illuminator housing, lens, optical system (reflector), ballast, and lamp. For high bay applications the light source shall be maintainable from a height of no greater than 12 feet from the deck.

* Be fully dimmable

*Be designed to illuminate a space with dimensions comparable to:
(200') L x (100') W x (25') H
-with standard white illumination at 14 footcandles at the 50% rated life design point (as measured 30 inches from the deck)

-(assume reflectances of 40% for the overhead and bulkheads, and 20% for the deck)
-all “lighting fixtures” are to be installed on the port/stbd side perimeter and must be maintainable from main deck to a height not to exceed 12 feet.

* This product shall be certified by a nationally recognized testing laboratory (NRTL) accredited for testing lighting fixtures by the Occupational Safety and Health Administration (OSHA), U.S. Department of Labor for compliance with Underwriters Laboratories (UL), Inc. Standard for Luminaries, UL 1598 and the requirements specified herein.

* Lighting System power requirements should not exceed 13KW.

* Lighting System Controls should be centrally located at a single control point at the periphery of the space to be illuminated.

* Operate in an ambient temperature range of 0°F (-17.8°C) to 122°F (50°C).

* Be designed to withstand the high impact shock tests for grade A, type A equipment per MIL-S-901.

* Be designed to withstand a Type I vibration test per MIL-STD-167-1.

* Electromagnetic Interference (EMI). The HLG system shall meet the susceptibility requirements and limits of MIL-STD-461.

* The materials used in the construction of the LDS shall have a UL 94 Horizontal Burn (HB) rating indicating that the material has been subjected to and passed the UL 94 HB test. The maximum burn rate of the material shall not exceed 3.0 inches/minute. It is preferable that the test specimens exhibit no dripping, puddling or exfoliation during the test and do not continue to burn or smolder after the flame source has been removed.

* When burned, the material shall not produce smoke that is toxic that would impede the progress of personnel attempting to extinguish the blaze. The LDS system shall have a maximum specific optional density of the smoke of less than 50 when tested in accordance with ASTM D2843.

* Be furnished with a mounting system. The mounting system shall be adjustable such that no deflection of the LDS is evident after installation.

* Have a light source with a minimum operating life of 10,000 hours and retain 80% of its initial illumination levels after 5,000 hours of operation.

* Shall obtain a 50% illumination level within 2 minutes of initial system startup and shall obtain full illumination within 10 minutes of initial startup when operating in an ambient temperature of 60°F.

* The LDS, when used in conjunction with the optional filter assembly and dimming device shall be compatible with "Night Vision Devices" (NVDs) and shall not cause users of such devices to become "blind" when used in areas where the lighting system is operating.

This announcement is issued to consider all potential sources and does not obligate the Government to award a contract. Descriptive literature, such as specifications, drawing and technical requirements can be forwarded to:
NSWCCD C/9343
1569 Constitution Ave
Phila, Pa 19112-5083.
No telephone request will be accepted

All submissions are due by 10 Oct 03.